# Light Ratio:

① Compute difference in light intensity between main and fill

| | | | |
|---|---|---|---|
| f(4) = 1 | | | |
| f(5.6) = 1/2 | | 2+1 = 3:1 | |
| f(8) = 1/4 | | 4+1 = 5:1 | |

Example: If main light gives reading for f(5.6) and fill light is at f(4) the difference is 2 x more light at main vs that from fill - The highlite side recieves light from both main and fill which = 2 units + 1 = 3 units The fill = 1 unit and the ratio is 3:1

| Difference: | | Ratio |
|---|---|---|
| | 1 f-stop | 3:1 |
| | 2 f stop | 5:1 |
| | 3 f-stop | 9:1 |

1 f-stop = main light 2x more than fill
2 f-stop = " " 4x " " "
3 f-stop = " " 8x " " "

Vericolor II

Studio Photography
August 1980 p. 24

Gamma = 0.6

1 f-stop exposure = 0.3

| | | | |
|---|---|---|---|
| .3 × .6 = | .18 | = 2 : 1 | ratio |
| | .23 | 2 1/2 : 1 | |
| | .28 | 3 : 1 | |
| | .36 | 4 : 1 | |
| | .42 | 5 : 1 | |
| | .46 | 6 : 1 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Stops Difference – | 1 | 1 1/3 | 1 2/3 | 2 | 2 1/3 | 2 2/3 |
| Light Ratio – | 2:1 | 2 1/2:1 | 3:1 | 4:1 | 5:1 | 6:1 |

Outdoor Portraits:

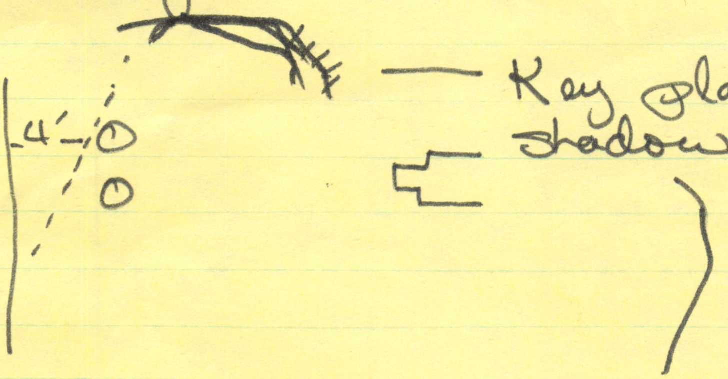
Tree near edge of woods on northeast or northwest side

Choose good background on highlite side of tree.

Subject on highlite side.

# Valentine Banquet

Key light 45° @ 10'
Fill light 80° @ 15'




Average redding aimed at camera
= f (8)
Fill = −2/3
Key = +1/3
} = 1 f-stop diff. between two lights

Key light on one side of face only

1 f-stop diff. to eliminate strong contrast

Underexposed = green shadows –
compressed ~~shadows~~
gray scale in black

Base density – .12 – .16

shadow density – .25 – .35 } Density Difference = .90

highlight density – .95 – 1.25

crossover problems below .10 above 1.55

Fill Light = set shadow density
aim = .30

Densitometer reading from black scale

Single light .41

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Single light .41

The background stained window at 1/30 sec. may be correct, but underexposure on highlite will cause printing to overexpose window and "wash out". If the window was correct at 1/8 @ f(5.6) the underexp will match and print correctly.

— Question 2-light system
Each far side gets 3 f stop diff. on shadow to highlite – center areas 1 f stop diff in shadow to highlite.

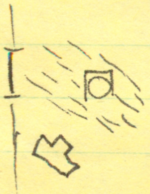
— Need two brackets for flash
Regular for 35 mm and opposite for Bronica

After taking pic. in sanc.

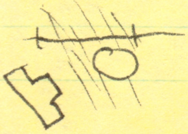
1. set-up 35 mm with 85-200 and star filter to be ready for ceremony.
2. Take Bronica with flash to dressing etc., then back to sanc. to get father bride going in.
3. Before ~~the~~ I set up the 35 in aisle to take parents, ring ~~bear~~ bearers etc. going down. Use <u>400 ASA</u>

S.G.

**1.** Subject: Close-up from window light with stained glass in background
Light Reading from window = 1/4 @ f(5.6)
Fill Light <u>auto</u> Yellow = 2 stop under f(5.6)



a.* The light from window should be read at subject and shutter speed set for f(5.6) with auto yellow fill light. The back window will be exposed with lens settings from side window as long as they are similar (stained <u>vs</u> clear)



→ If the subject is set away from the window, light 'fall off' will cause a proper exposure at subject to over expose stained window. With light coming from second window as above the subject can be placed a proper distance from the widow so the highlite exposure will match the background stained glass window

Feb. 12 Wedding — Light Reading at window was probably 1/8 to 1/30 @ f(5.6). The subject was about 5' from the window with reading
* about 1/4 @ f(5.6). *Mistake in reading 1/4 sec. [1/4 of 100 = 1/25] I took reading as 1/30 sec. which was off by 3 f stop from highlite reading. The auto fill light was set at about 1½-2 f-stop from f(5.6) highlite reading. The fill will thus become the highlite ~~with~~ at 1½-2 stop under exposure.

## Graflite

| | | | G.N. |
|---|---|---|---|
| 20' | f(5.6) | straight | 112 |
| 20' | f(2.8/4) | reflector | 66 |

Main Light 5.6 / 8

| | | | | |
|---|---|---|---|---|
| f(4) | Yellow | – fill | = shadow fill 1:3 | (−1½) |
| f(5.6) | Red | – fill | = almost 1:1 | (−½) |
| f-8/11 | Blue | – | = fill becomes main light | (+1) |
| f(11) | Purple | – | – " " | +1½ |

# Reflectance Range —

Total Scene Brightness range = the sum total of the light ratio combined with the scene reflectance range

Formula: Light ratio x reflectance range = total scene brightness range

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